IN THE UNITED STATES DISTRICT COURT FOR THE MIDDLE DISTRICT OF TENNESSEE Nashville Division

L.W., by and through her parents and next friends, Samantha Williams and Brian Williams, *et al.*,

Plaintiffs,

and

UNITED STATES OF AMERICA,

Plaintiff-Intervenor,

ν.

JONATHAN SKRMETTI, in his official capacity as the Tennessee Attorney General and Reporter, et al.,

Defendants.

Civil No. 3:23-cv-00376

Judge Richardson

Judge Newbern

EXPERT REBUTTAL DECLARATION OF DEANNA ADKINS, MD

- 1. I have been retained by counsel for Plaintiffs as an expert in connection with the above-captioned litigation.
- 2. I have actual knowledge of the matters stated in this declaration and have collected and cite to relevant literature concerning the issues that arise in this litigation in the body of the report.
- 3. My credentials are set forth in my initial declaration filed with the Court at ECF No. 29.
- 4. I have reviewed the declarations of Drs. Stephen Levine, Paul Hruz, James Cantor, Michael K. Laidlaw, Sven Román, and Geeta Nangia. Here, I respond to some of the central points in those declarations. I do not specifically address each study or article cited, or each point made, but instead explain the overall problems with some of the conclusions that the

Defendants' experts draw and provide data showing why such conclusions are in error. I reserve the right to supplement my opinions if necessary as the case proceeds.

TREATMENT PROTOCOLS FOR ADOLESCENTS WITH GENDER DYSPHORIA

- 5. Defendants' experts suggest that gender clinics routinely provide medical interventions to adolescents without proper mental health assessments and without informing patients and their parents of the potential risks of treatment. I cannot speak to the practice of every gender clinic in the country but both the Endocrine Society Clinical Practice Guideline (the "Endocrine Society Guideline") and the World Professional Association of Transgender Health Standards of Care (the "WPATH SOC") require rigorous mental health assessments and informed consent processes before any medical treatment is initiated. In my experience treating over 600 youth with gender dysphoria during my tenure at the Duke Center for Child and Adolescent Gender Care (the "Duke Gender Care Clinic"), each patient undergoes an extensive psychological assessment and, if medical interventions are deemed medically appropriate, an extensive informed consent process before such interventions are provided.
- 6. In my practice, I regularly communicate with practitioners who treat adolescents with gender dysphoria. The assessment and informed consent process that we utilize at the Duke Gender Care Clinic is comparable to the processes used at gender clinics across the country as I understand them. If providers are foregoing assessments and informed consent such practice would be outside the recommended guidelines for care.
- 7. It is not the case that we encourage any patient to initiate gender-affirming care as some of the Defendants' experts suggest. *See, e.g.*, Hruz ¶ 64; Levine ¶ 122. Consistent with the WPATH SOC and the Endocrine Society Guideline, each patient is met first by providers who explore the patient's medical and mental health history and identity. Under the standards of care,

no patient is rushed into medical treatment, and no treatment is initiated without appropriate evaluation and an informed consent process. Gender clinics use a multidisciplinary team approach and thus the decision to initiate gender affirming care is made by a team including the providers, the patient and their parents with informed consent.

- 8. It appears to be the position of the Defendants' experts that waiting until a patient turns 18 years of age before initiating medical treatment for gender dysphoria would not cause harm to minor patients. *See, e.g.*, Levine ¶238; Nangia ¶176. This is wrong. Many physiological changes that happen during endogenous puberty cause severe distress for patients with gender dysphoria and can be difficult, if not impossible, to reverse with subsequent treatment. Based on my clinical experience, patients with severe dysphoria who are able to receive treatment prior to age 18 experience substantial mental health improvements from gender-affirming medical interventions.¹
- 9. Dr. Levine critiques WPATH because it is "a voluntary membership organization" and "attendance at its biennial meetings has been open to trans individuals who are not licensed professionals." Levine ¶ 62. The fact that non-professionals can attend meetings does not undermine the scientific rigor of WPATH's Standards of Care. Only licensed professionals participate in the drafting of the Standards of Care. Defendants' experts also attempt to discredit

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¹ Lane, A., & Wilson, T. A. (2020). Longitudinal impact of gender-affirming endocrine intervention on the mental health and well-being of transgender youths: Preliminary results. International Journal of Pediatric Endocrinology, 2020(1). https://doi.org/10.1186/s13633-020-00078-2; llen, L. R., Watson, L. B., Egan, A. M., & Moser, C. N. (2019). Well-being and suicidality among transgender youth after gender-affirming hormones. Clinical Practice in Pediatric Psychology, 7(3), 302–311. https://doi.org/10.1037/cpp0000288; Becker I, Auer M, Barkmann C, Fuss J, Möller B, Nieder TO, Fahrenkrug S, Hildebrandt T, Richter-Appelt H. A Cross-Sectional Multicenter Study of Multidimensional Body Image in Adolescents and Adults with Gender Dysphoria Before and After Transition-Related Medical Interventions. Arch Sex Behav. 2018 Nov;47(8):2335-2347. doi: 10.1007/s10508-018-1278-4. Epub 2018 Aug 7. PMID: 30088234.

WPATH by referring to it as an advocacy organization. This critique is also misplaced. Like many medical associations, WPATH both advocates for patients and pursues rigorous scientific research. This is not a new phenomenon in medicine. The American Diabetes Association, for example, is a professional association that both advocates for patients with diabetes and is a scientific organization. Additionally, rigorous papers are presented at the WPATH meetings and well-funded scientific research is reported on. Similarly, the American Heart Association has scientific meetings, community engagement and advocacy arms.

SAFETY AND EFFICACY OF TREATMENTS

Safety and Efficacy of Puberty Blockers

- 10. Puberty blockers have been used to treat patients with gender dysphoria since at least 2004 in the United States. We have almost 20 years of data showing the safety and efficacy of this treatment for patients with gender dysphoria. We have over 30 years of data about the safety of this treatment based on data from treating children with precocious puberty. It is therefore not accurate to suggest that little is known about the effects of puberty blockers.²
- 11. Though Defendants' experts warn about delaying puberty, use of puberty blockers in transgender youth does not delay puberty beyond the typical age range. Pubertal development has a very wide age variation among individuals. Puberty in individuals assigned male at birth typically begins anywhere from age nine to age fourteen, and sometimes does not complete until a person's early twenties. For those individuals assigned female at birth, puberty typically occurs sometime within the ages of eight to 17, generally beginning between the ages of eight and 13. Protocols used to treat adolescents with gender dysphoria would tend to put them in the latter

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² Federica, et al. Management of Endocrine Disease: Long-term outcomes of the treatment of central precocious puberty. *European Journal of Endocrinology*. 2016; 174(3): R79–R87. doi: https://doi.org/10.1530/EJE-15-0590.

third of typical pubertal age ranges but nothing outside of the typical range.³ Though some peers of a patient on puberty blockers to treat gender dysphoria may undergo pubertal changes earlier than the gender dysphoric patient, many peers will have comparably timed or later puberty. In fact, one of the reasons WPATH SOC 8 has eliminated strict age guidelines for hormone therapy was so that patients moving from puberty blockers to hormones could have an individualized assessment about when initiating puberty is appropriate. There is no data to support the assumption of Defendants' witnesses that delaying puberty within these normal age ranges will have negative short- or long-term social and developmental consequences.

12. In my clinical experience, puberty blockers can be an essential tool to improve the health and well-being of some transgender adolescents with gender dysphoria. Where medically indicated, puberty blockers effectively prevent the worsening distress that is common among adolescents with gender dysphoria upon the onset of puberty. In addition to preventing this worsening distress, puberty blockers allow an adolescent and their family time to assess future treatment options. Accordingly, when the time comes for these patients to make a choice about stopping puberty blockers or going onto gender affirming hormones, they have had time to process with themselves, their parents, and their clinical team what their life will look like if they undergo the puberty that does not match their sex assigned at birth. This allows a thorough understanding of the benefits and potential side effects of this course of treatment. In my clinical experience, their mental health improves with lower levels of anxiety, improvement in depression, more interactivity at school and with their peers. Their school performance often

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³ Hembree, W.C., Cohen-Kettenis, P.T., Gooren, L., et al. Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline. *The Journal of Clinical Endocrinology & Metabolism*. 2017; 102(11): 3869-903; Euling, S.Y., Herman-Giddens, M.E., Lee, P.A., et al. Examination of U.S. Puberty-Timing Data from 1940 to 1994 for Secular Trends: Panel Findings. *Pediatrics*. 2008; 121 (Supplemental 3): S172-S191.

improves as well due to the improvements in their mental health overall.

13. In his declaration, Dr. Hruz claims that patients treated with puberty blockers will experience a range of health consequences. *See, e.g.*, Hruz ¶¶ 73-79. For example, he says that patients treated with puberty blockers will be at an elevated risk of lower bone mineral density. Hruz ¶ 74. During the course of treatment, patients may have reduced bone mineral density relative to their peers who are progressing through puberty which naturally increases bone mineral density at a faster rate than the bone density accrual that occurs pre-puberty. The data available shows that most keep a stable density, but when compared to peers, who are adding more density, their Z scores (density compared to those of the same age and gender) are lower. There are a number of issues in this area that may lead to false comparisons as it is not clear which gender norm should be used. Many studies don't correct for bone age, pubertal stage, or height, all of which confound the DXA measurements. In addition, the studies available, even with these limitations, show that after two to three years on gender affirming hormone therapy (or endogenous puberty), the patient's bone structure and strength increases.⁴ Additionally,

⁴ Some transgender women do not return to their baseline before treatment within this short window. However, their baseline bone densities are frequently low to start. The cause of this is not clear. Some scientists suspect it has to do with a decreased level of activity seen in transgender women in general. This has been shown in research and also has been my experience with patients. *See* van der Loos, M.A., Hellinga, I., Vlot, M.C., et al. Development of Hip Bone Geometry During Gender-Affirming Hormone Therapy in Transgender Adolescents Resembles That of the Experienced Gender When Pubertal Suspension Is Started in Early Puberty. *Journal of Bone and Mineral Research*. 2021; 36(5): 931-41. doi: https://doi.org/10.1002/jbmr.4262; Schagen SEE, Wouters FM, Cohen-Kettenis PT, Gooren LJ, Hannema SE. Bone Development in Transgender Adolescents Treated With GnRH Analogues and Subsequent Gender-Affirming Hormones. J Clin Endocrinol Metab. 2020 Dec 1;105(12):e4252–63. doi: 10.1210/clinem/dgaa604. PMID: 32909025; PMCID: PMC7524308.

Dr. Hruz focuses on a study by Klink that reported some reduction in bone density at age 22 among 15 transgender women treated with blockers during adolescence. *See, e.g.*, Hruz ¶ 79. But the authors concluded that "[t]he contribution of GnRHa treatment is at best tentative," as they noted other factors that could explain the results, such as lower bone density among the transgender women before commencement of treatment, possibly due to their discomfort

studies have shown no changes in bone mineralization among patients with central precocious puberty treated with puberty blockers for a period of three years.⁵ Dr. Hruz raises the issue of risk of fracture later in life, but we have been using puberty blockers to treat patients with precocious puberty for over 30 years and have not observed these long-term effects. Hruz ¶ 91. As with all of the risks of puberty blockers, the risks related to bone mineralization and the state of the evidence are discussed with patients and their parents during the informed consent process and are weighed against the risks of not providing treatment.

- 14. With respect to Dr. Hruz's claim about weight gain, there is no consistency in the data on weight gain or loss in transgender individuals and, in my clinical experience, these outcomes most often relate to factors such as socioeconomic status, ability to participate in sports, and living in a food desert, as opposed to their hormonal status. This correlates with findings in my cisgender patients as well. I have observed much more significant weight gain in patients on certain antidepressants such as aripiprazole compared to patients being treated with hormones.
- 15. Additionally, Dr. Hruz suggests that patients on puberty blockers will have slower rates of growth in height. Hruz ¶ 119. Their rate is normal for those not in puberty. For transgender girls, there is some overall reduced height growth, but the reduced height is both consistent with the gender-affirmation aspect of the care (*i.e.*, a transgender girl's treatment will aim to align her physiological characteristics, including height, consistent with what is typical for girls generally) and still within the expected overall range for the patient's height based their mid-

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engaging in sports. Klink, D., Caris, M., Heijboer, A., et al. Bone Mass in Young Adulthood Following Gonadotropin-Releasing Hormone Analog Treatment and Cross-Sex Hormone Treatment in Adolescents With Gender Dysphoria, *The Journal of Clinical Endocrinology & Metabolism*. 2015; 100(2): E270-E275, at E274. doi: https://doi.org/10.1210/jc.2014-2439.

⁵ Park H.K. Lee H.S. Ko, I.H. et al. The effect of gonadotrophin-releasing hormone agonis

⁵ Park, H.K., Lee, H.S., Ko, J.H., et al. The effect of gonadotrophin-releasing hormone agonist treatment over 3 years on bone mineral density and body composition in girls with central precocious puberty. *Clinical Endocrinology*. 2012; 77(5): 743-48.

parental average. For transgender boys, puberty blockers would lead to increased height growth, which is likewise consistent with the gender-affirmation aspect of the care and also still within the expected overall range for what their adult height would be.

- 16. Dr. Hruz's claim that brain development occurring during puberty may be negatively affected by puberty blockers is not accurate. *See* Hruz ¶¶ 76-78. Patients with gender dysphoria who are treated with puberty blockers undergo hormonal puberty with all the same brain and other development.⁶ There is no research suggesting that treatment has negative impact on brain development or executive functioning and I have not seen this in my practice at all.
- 17. Dr. Hruz's claim is inaccurate for the additional reason that some people never go through hormonal puberty, such as patients with Turner Syndrome, and still have normal brain development with respect to cognition and executive function. He also seems to imply that youth with gender dysphoria have their puberty delayed beyond the typical age range, *see* Hruz ¶ 75, but, as I discussed above, this is not accurate. He also implies that gender dysphoric youth treated with puberty blockers remain on them longer than those treated for precocious puberty. This is also not accurate. The longest my patients with gender dysphoria are treated with puberty blockers before the introduction of pubertal hormones is around three years. By contrast, many patients with precocious puberty are treated with puberty blockers for five to seven years.

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⁶ Staphorsius, A. S., Kreukels, B. P., Cohen-Kettenis, P. T., et al. Puberty suppression and executive functioning: An fMRI-study in adolescents with gender dysphoria. *Psychoneuroendocrinology*. 2015; 56: 190-99. doi:

https://doi.org/10.1016/j.psyneuen.2015.03.007; Schneider MA, Spritzer PM, Soll BMB, Fontanari AMV, Carneiro M, Tovar-Moll F, Costa AB, da Silva DC, Schwarz K, Anes M, Tramontina S and Lobato MIR (2017) Brain Maturation, Cognition and Voice Pattern in a Gender Dysphoria Case under Pubertal Suppression. *Front. Hum. Neurosci.* 11:528. doi: 10.3389/fnhum.2017.00528; Nienke M. Nota, Baudewijntje P.C. Kreukels, Martin den Heijer, Dick J. Veltman, Peggy T. Cohen-Kettenis, Sarah M. Burke, Julie Bakker, Brain functional connectivity patterns in children and adolescents with gender dysphoria: Sex-atypical or not?, Psychoneuroendocrinology, Volume 86, 2017, Pages 187-195, ISSN 0306-4530, https://doi.org/10.1016/j.psyneuen.2017.09.014.

Safety and Efficacy of Hormone Therapy

- 18. Hormone therapy is safe, effective, and essential for the well-being of many transgender adolescents. For example, boys who are transgender treated with puberty blockers and gender affirming hormones will receive the same amount of testosterone during puberty that non-transgender boys generate with their testes. They will grow darker and thicker facial and body hair, experience fat distribution away from the hips, have decreased breast growth, and develop lower vocal pitch. Likewise, girls who are transgender and treated with puberty blockers and gender affirming hormones will receive the same amount of estrogen during puberty that non-transgender girls generate endogenously. They will develop breast tissue, fat will be distributed to their hips, their skin will soften, and their vocal pitch will not deepen further. My patients who receive medically appropriate hormone therapy and who are treated consistent with their gender identity in all aspects of life experience significant improvement in their health.
- 19. Dr. Hruz claims that the risks of hormone therapy "include disfiguring acne high blood pressure, weight gain, abnormal glucose tolerance, breast cancer, liver disease, thrombosis, and cardiovascular disease." Hruz ¶ 91. In my clinical experience, I have rarely seen these side effects in my patients. Although a high percentage of transmasculine individuals have acne, the severity is highly variable. Most often we see more acne in those who have a strong family history of significant pubertal acne. Most of my transgender patients have mild acne requiring only routine washing. The natural history of the acne during testosterone use in transmasculine patients is that is increases in the first six months and then improves by around one to two years of treatment. Only a few have it to the point where there may be scarring in my clinical experience. In my practice, we have patients start on a preventive regimen of acne wash from the beginning of treatment and provide them with the standard acne treatment that many teens use if the issue arises. Of the alleged risks identified by Dr. Hruz, the most common would be "cardiovascular

disease" in transgender women, but this is likewise usually only present when a patient is denied care and self-administers the treatment without appropriate clinical supervision. Blood pressure measurements have been documented to increase with a statistical significance, but no clinical significance. Transgender men do not have more cardiovascular disease like stroke or heart attack than similar cisgender men. Transgender women have reported increase in stroke when on older formulations of estrogen. When their blood pressure levels are higher than the normal physiologic range, close monitoring can ameliorate this potential issues as it can with high blood pressure in transgender men. In my clinical experience, patients only develop high blood pressure when there is a strong family history of high blood pressure. In my extensive practice, I have only had to treat two transgender patients for hypertension even though I routinely treat many of my cisgender patients for hypertension.

20. When treating patients with hormones, we closely monitor dosing and circulating hormone levels to minimize any risk of adverse effects. This is true for patients with gender dysphoria and any other conditions requiring hormonal treatment. In the past, some of the estrogens used to treat patients did increase thrombovascular risks, but with current forms of medication and appropriate monitoring and dosing, we are not seeing these side effects. In addition, estradiol via patch has been used to treat cisgender men with prostate cancer and that use has not shown an increase in cardiovascular effects. For transgender men treated with testosterone, it is uncommon to see red blood cell counts that are atypical for males, and data

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⁷ Weinand, J.D. & Safer, J.D. Hormone therapy in transgender adults is safe with provider supervision; A review of hormone therapy sequelae for transgender individuals. *Journal of Clinical and Translational Endocrinology*. 2015; 2(2): 55-60. doi: https://doi.org/10.1016/j.jcte.2015.02.003.

have not shown⁸ increased risk of cardiovascular disease for transgender men treated with testosterone.

- 21. Defendants' claim that hormone therapy is harmful because adolescents receive, what they call, "high, supraphysiologic doses" of hormones. But this is not accurate. Each patient is treated individually and their hormones are managed based on their physiological and clinical needs. The guidelines recommend that the hormone levels be kept in the normal physiologic range for their gender identity, not their sex assigned at birth. The levels are thus in the physiologic range for their gender identity. ECF No. 112, pp. 12-13.
- 22. Defendants seem to suggest that hormone treatment is harmful because it leads to a "lifetime" of continuing to receive such therapy. *See, e.g.*, Cantor ¶¶ 224; Levine ¶¶ 121; Laidlaw ¶¶ 54. For some patients this is not the case as they may undergo hormone treatment for a period of time and then discontinue the treatment if dysphoria is well-managed and the changes from the hormone therapy have adequately addressed the underlying dysphoria. For those who do remain on maintenance doses of hormone therapy for their lifetimes, the risks of ongoing hormone therapy can be well-managed and are not unlike risks associated with those present for other patients who undergo long-term hormone therapy for different conditions like hypothyroidism, Kleinfelter's Syndrome, Turner Syndrome, patients who have to have their ovaries or testicles removed due to cancer, torsion or other cause as well as those with hypopituitarism. Many endocrine conditions are lifelong and require lifelong use of hormone replacement including hypothyroidism (congenital hypothyroidism requires treatment from birth to death), Type 1 diabetes, which requires insulin for life. Additionally, adrenal insufficiency is

⁸ Wierckx K., Mueller, S., Van Caenegem, E., et al. Long-term evaluation of cross-sex hormone

treatment in transsexual persons. *The Journal of Sexual Medicine*. 2012; 9(10): 2641-51. doi: https://doi.org/10.1111/j.1743-6109.2012.02876.x.

a lifelong condition whether its cause is a hereditary enzyme deficiency which presents at birth, or, an autoimmune condition, an infection or an injury (these present later in life). These patients require lifelong steroids. Ultimately, many conditions are treated with lifelong medical management – including hormone therapy – and that does not pose an inherent risk to patient health. In fact, the lifelong management improves patient health and extends life.

- 23. Defendants' experts also discuss the fertility implications of gender-affirming care. Levine ¶ 189; Hruz ¶¶ 89-90. Dr. Levine's sweeping suggestion that hormone therapy affects fertility for all patients is simply incorrect. Many transgender individuals conceive children after undergoing hormone therapy. Pregnancy among trans men after undergoing testosterone therapy is very common. A recent eight-year study found that four months after stopping testosterone treatment, transgender men had comparable egg yields to non-transgender women.

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- 24. Going directly from puberty blockers to gender-affirming hormones does affect fertility. For these patients, and any patients treated with estrogen, who are concerned about the impact of estrogen on fertility, fertility preservation remains an option. More generally, many medical interventions necessary to preserve a person's health and well-being can impact an

⁹ Light A.D., Obedin-Maliver J., Sevelius J.M., et al. Transgender men who experienced pregnancy after female-to-male gender transitioning. *Obstetrics Gynecology*. 2014; 124(6): 1120-27; Maxwell S., Noyes N., Keefe D., Berkeley A.S., et al. Pregnancy Outcomes After Fertility Preservation in Transgender Men. *Obstetrics Gynecology*. 2017; 129(6):1031-34; Neblett M.F. & Hipp H.S. Fertility Considerations in Transgender Persons. *Endocrinology and Metabolism Clinics*. 2019; 48(2): 391-402.

¹⁰ See, e.g., Moseson, H., Fix, L., Hastings, J., et al. Pregnancy intentions and outcomes among transgender, nonbinary, and gender-expansive people assigned female or intersex at birth in the United States: Results from a national, quantitative survey. *International Journal of Transgender Health*. 2020; 22(1-2): 30-41. doi: https://doi.org/10.1080/26895269.2020.1841058.

¹¹ Leung, A., Sakkas, D., Pang, S., et al. Assisted reproductive technology outcomes in female-to-male transgender patients compared with cisgender patients: a new frontier in reproductive medicine. *Fertility and Sterility*. 2019; 112(5): 858-65.

individual's fertility, but we proceed with the treatment after informed consent.

- 25. Defendants' witnesses also critique an update to the WPATH SOC, which no longer sets more rigid age limitations around the initiation of hormone therapy. This allows for flexibility in caring for patients who have a need to access hormones earlier due to early puberty or earlier onset and severity of dysphoria. We still counsel families about the risks and benefits of the treatments and the limitations of data available for younger adolescents. Generally speaking, this is how the practice of medicine works we use the best available evidence from research and clinical experience to tailor treatment for each individual.
- 26. Ultimately, in my clinical experience, gender-affirming medical care drastically improves the health and well-being of adolescents with gender dysphoria for whom the care is medically indicated. And contrary to the suggestions made by the Defendants' experts, my clinical experience has shown that adolescents who access needed gender-affirming medical treatment have improved social and romantic relationships and are able to develop peer relationships with cisgender and transgender people alike.
- 27. For patients for whom these medical interventions are indicated, taking them off of their puberty blockers or their GAHT is likely to cause severe harms and no discernible benefits. The physical consequence to stopping GnRH (puberty blockers) in transgender patients can be permanent change in the secondary sex characteristics which can lead to future severe and/or worsening dysphoria. An increase in dysphoria can increase depression, anxiety, self-harm, hospitalizations, and suicidality in transgender adolescents. These permanent changes can lead to future surgeries that would not have been required had the patient remained on treatment. These permanent changes can also make it more difficult for transgender adolescents to navigate society in both adolescence and adulthood as they can make it harder for people to be perceived

as cisgender thereby increasing the potential for harassment and violence. I have personally witnessed the differences for my patients who are able to begin treatment early in puberty when compared to patients who undergo their endogenous puberty. Early intervention dramatically affects a patient's ability to "pass" as cisgender, which can have many practical and mental health benefits.

- 28. Titrating down hormone therapy can be done but is not medically recommended and is not consistent with my practice. It will lead to transgender individuals experiencing physiological changes in their bodies that are consistent with their assigned sex at birth, including but not limited to menstrual cycles, facial hair, body hair, change in body shape. These physiological changes will once again lead the individual back into dysphoria and worsen their mental health. And because adolescence is such a critical time with respect to these permanent changes, even titrating down the hormone therapy to a non-therapeutic dose could lead to permanent physical changes that will affect a patient for their lifetime.
- 29. As the Director of a transgender health clinic in North Carolina, I see patients who live out-of-state, and I am acutely aware of the difficulties that families endure in accessing gender-affirming care, including long wait times and barriers associated with insurance and travel. The longer the patient is unable to access their medically necessary care, the worse their suffering will be. In addition, transgender youth are often wary of medical providers and can take longer to develop a therapeutic and trusting relationship with their provider. This change in providers can set them back in their care and can have lasting physical and mental health effects.

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I declare under penalty of perjury that the foregoing is true and correct.

Executed on: May 31, 2023.

DEANNA ADKINS, MD

CERTIFICATE OF SERVICE

I hereby certify that on June 1, 2023, the undersigned filed the foregoing document via this Court's electronic filing system, which sent notice of such filing to the following counsel of record:

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